(19) World Intellectual Property Organization

International Bureau





(43) International Publication Date 6 May 2005 (06.05.2005)

PCT

(10) International Publication Number WO 2005/041495 A1

(51) International Patent Classification⁷:

H04L 12/56

(21) International Application Number:

PCT/EP2004/009114

- (22) International Filing Date: 13 August 2004 (13.08.2004)
- (25) Filing Language:

English

(26) Publication Language:

English

(30) Priority Data:

03022150.1

30 September 2003 (30.09.2003) E

- (71) Applicants (for all designated States except US): SONY INTERNATIONAL (EUROPE) GMBH [DE/DE]; Kemperplatz 1, 10785 Berlin (DE). SIEMENS AG [DE/DE]; Wittelsbacherplatz 2, 80333 München (DE).
- (72) Inventors; and
- (75) Inventors/Applicants (for US only): RIEDEL, Matthias [DE/DE]; Grünewaldstrasse 27B, 70192 Stuttargt (DE). EISL, Jochen [DE/DE]; Breslauerstrasse 48, 85748 Garching (DE).
- (74) Agent: RUPP, Christian; Mitscherlich & Partner, Sonnenstrasse 33, Postfach 33 06 09, 80066 München (DE).

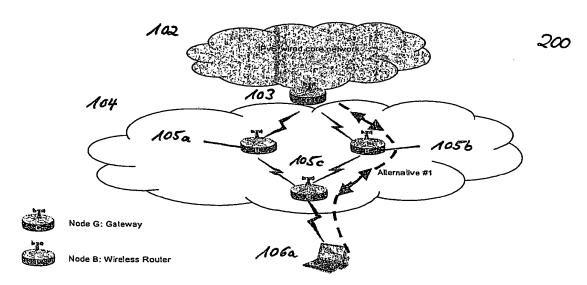
- (81) Designated States (unless otherwise indicated, for every kind of national protection available): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.
- (84) Designated States (unless otherwise indicated, for every kind of regional protection available): ARIPO (BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

Published:

with international search report

For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

(54) Title: BIDIRECTIONAL QoS RESERVATION WITHIN AN IN-BAND SIGNALING MECHANISM



(57) Abstract: A mechanism for a bidirectional QoS reservation procedure within an in-band signaling mechanism gives symmetric real-time services running on mobile devices, which are used to support different access technologies in dynamic, mobile, wireless IP networks where the quality of the node connectivity can sometimes be unpredictably time-varying, the possibility to mutually reserve, monitor and adapt QoS resources and service parameters for up- and downstream direction along a communication path. The proposed solution thereby optimizes conventional QoS reservation mechanisms, especially for adaptive real-time services in wireless and wireless ad-hoc networks, by making use of a dynamic bidirectional QoS reservation in-band signaling approach. The expression ,in-band" refers to a situation where separation between control and user plane data is abandoned.